WO 2005/047262 PCT/IB2004/003652

11

CLAIMS

1. A crystalline form of gatifloxacin obtainable by means of a process which includes the following steps:

- 5 the crude gatifloxacin is dissolved in methanol by heating to reflux temperature, using between 50 and 65 volumes of methanol for each unit by weight of crude gatifloxacin,
- it is cooled to a temperature ranging between 15° C
 and 25° C within a period of time not exceeding 1.5 hours,
 - during the cooling process it is seeded with form I gatifloxacin,
- it is then cooled to a temperature comprised between 0° C and 5° C and kept at this temperature for at least 1 hour,
 - the solid product is separated by filtration, and
 - the solid product is dried in an oven under vacuum to constant weight.
- 20 2. A process for preparing a crystalline form of gatifloxacin, which includes the following steps:
 - the crude gatifloxacin is dissolved in methanol by means of heating to the reflux temperature,
 - it is cooled to a temperature between 15° C and 25° C in a period of time not exceeding 1.5 hours, and
 - it is seeded with form I gatifloxacin.

25

30

- 3. A process according to Claim 2, characterised in that the crude gatifloxacin is dissolved in methanol, using between 50 and 70 volumes of methanol for each unit by weight of crude gatifloxacin.
- 4. A process according to Claims 2 and 3, characterised in that it further comprises the following steps:

WO 2005/047262 PCT/IB2004/003652

12

- the suspension is cooled to a temperature between 0° C and 5° C and kept at that temperature for at least 1 hour,
- the solid product is filtered, and
- 5 the product is dried in an over to constant weight.
 - 5. Use of the form of gatifloxacin according to Claim 1 for the manufacture of a medicament for the treatment of infectious diseases of bacterial origin.